CLAIMS

1. A vector that encodes a replication competent HIV-1 virus, said vector comprising an HIV-1 genome in which a region non-essential for viral replication has been replaced by a reporter gene.

2. The vector according to claim 1 wherein said reporter gene is selected from the group consisting of the renilla luciferase reporter gene, the SEAP reporter gene, the CAT gene, and the green fluorescence protein gene.

3. The vector according to claim 2 wherein said reporter gene is selected from the group consisting of the renilla luciferase reporter gene and the SEAP reporter gene.

4. The vector according to claims 1, 2 or 3 wherein the region non-essential for viral replication encodes the nef gene or a fragment of the nef gene.

5. The vector according to claims 1, 2 or 3 wherein the region non-essential for viral replication encodes the vpr gene or a fragment of the vpr gene.

6. The vector according to claims 1, 2 or 3 wherein the HIV-1 genome is the genome of the pNL4-3 proviral clone.

7. The vector according to claims 1, 2 or 3 wherein the HIV-1 genome is the genome of the pYU-2 proviral clone.

8. The vector according to claims 1, 2 or 3 wherein the HIV-1 genome is the genome of the p89.6 proviral clone.

9. The vector according to claims 1, 2 or 3 wherein the HIV-1 genome is the genome of the HIV-1 Lai proviral clone.

10. A cell comprising the vector of claim 1, 2 or 3.

11. A method of screening for compounds that exhibit anti-viral activity against HIV-1 comprising:

a) adding a test compound to mammalian cells infected or cells to be infected with the vector according to claim 1, 2 or 3; and

b) comparing reporter gene activity in cells exposed to the test compound to the level of expression in control cells,

wherein a reduction in the level of reporter gene expression indicates the test compound inhibits HIV-1 replication.

12. The method according to claim 8, wherein the mammalian cells are MT-2 #18 cells.

13. A vector that encodes a replication competent HIV-1 virus, said vector comprising an HIV-1 genome in which a region non-essential for viral replication has been replaced by a nucleic acid sequence encoding a functional renilla luciferase enzyme.

14. The vector according to claim 13 wherein the renilla luciferase gene contains a cysteine to alanine substitution that results in a functional renilla luciferase enzyme.

15. The vector according to claim 13 wherein the region non-essential for viral replication encodes the nef gene or a fragment of the nef gene.

16. The vector according to claim 13 wherein the region non-essential for viral replication encodes the vpr gene or a fragment of the vpr gene.

17. The vector according to claim 13 wherein the HIV-1 genome is the genome of the pNL4-3 proviral clone.

18. The vector according to claim 13 wherein the HIV-1 genome is the genome of the pYU-2 proviral clone.

19. The vector according to claim 13 wherein the HIV-1 genome is the genome of the p89.6 proviral clone.

20. The vector according to claim 13 wherein the HIV-1 genome is the genome of the HIV-1 Lai proviral clone.

21. A cell comprising the vector of claim 13.

22. A method of screening for compounds that exhibit anti-viral activity against HIV-1 comprising:

a) adding a test compound to mammalian cells infected or cells that will be infected with the vector according to claim 13; and

b) comparing reporter gene activity in cells exposed to the test compound to the level of expression in control cells,

wherein a reduction in the level of reporter gene expression indicates the test compound inhibits HIV-1 replication.

23. The method according to claim 13, wherein the mammalian cells are MT-2 #18 cells.